1.   Fluid processing apparatus comprising, a vessel containing a hydrocyclone and defining an inlet chamber, the vessel having a vessel inlet arranged to feed the fluid into the inlet chamber, and the inlet chamber being arranged to receive fluid from the vessel inlet and to pass the fluid to an inlet of the hydrocyclone, the inlet chamber including coalescing means arranged to coalesce relatively small droplets contained in fluid received at the vessel inlet into larger droplets before passing the fluid to the hydrocyclone inlet, the coalescing means having a substantially predetermined external shape which defines at least one elongate liner hole for receiving a respective hydrocyclone liner <u>and which permits removal of the hydrocyclone liner without removing the coalescing means</u>.

3.   Apparatus according to claim 1 [or claim 2], wherein the coalescing means is arranged to cause the fluid to pass through fibres of predetermined varying wettability as the fluid passes towards the hydrocyclone inlet.

4.   Apparatus according to [any preceding] claim <u>1</u>, wherein the coalescing means is arranged to cause the fluid to pass through <u>fibres and wherein the coalescing means is further arranged to cause the fluid to pass through</u> regions in which the fibre

[ratio of volume of fibres per unit volume] density varies in a predetermined manner as the fluid passes towards the hydrocyclone inlet.

5.   Apparatus according to [any preceding] claim 1, wherein the coalescing means, includes a region of generally parallel fibres arranged at least in use, to extend generally parallel to the direction of fluid flow.

8.   Apparatus according to [any preceding] claim 1, wherein the inlet chamber includes an inlet arrangement which creates a plug flow regime at the inlet of the coalescing means.

9.   Apparatus according to [any preceding] claim 1, wherein the vessel is generally elongate and the hydrocyclone inlet is positioned generally at a first end of the vessel, the inlet chamber containing an inlet arrangement having an inlet baffle which divides the inlet chamber into an inner region which contains the hydrocyclone and an outer region adjacent the interior surface of the vessel wall, the vessel inlet being arranged to feed fluid into the outer region and the inlet baffle including at least one baffle aperture located generally at the second, distal end of the vessel and arranged to permit fluid flow from the outer region to the inner region.

11.   Apparatus according to claim 9 [or 10], wherein the vessel inlet is arranged to feed fluid into the outer region at a position between the two ends of the vessel.

12.   Apparatus according to [any of claim 9 to 11] claim 9, wherein the outer region extends along a shorter length of the vessel than the inner region.

13.   Apparatus according to [any of claims 9 to 12] claim 9, wherein the inlet baffle is generally cylindrical and the or each baffle aperture is arranged to cause a generally inwardly radial flow of fluid into the inner region.

14.   Apparatus according to [any of claims 9 to 13] claim 9 when the dependent from claim 5, wherein the parallel fibres extend in the inner region generally from the or each baffle aperture towards the first end of the vessel.

15.   Apparatus according to [any preceding claim] claim 1, wherein the coalescing means includes a mass of integrally-formed coalescing media defining a plurality of elongate holes for receiving one or more respective hydrocyclone liner.

16.   Apparatus according to [any preceding] claim 1, wherein the fluid is an oil/water emulsion.

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17.   Apparatus according to [any preceding] claim 1, wherein the overflow outlet of the hydrocyclone is closed.

18.   Apparatus according to [any preceding] claim 1, wherein the overflow and underflow outlets of the hydrocyclone are coupled together.

19.   Apparatus according to [any preceding] claim 1, wherein the vessel contains a plurality of hydrocyclones.

25.   Apparatus according to claim 1, wherein the coalescing means is mechanically supported by the vessel.